

RECEIVED

AUG 23 2011

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DEP Central Dist.

Transmittal

Attention: Mr. Tom Lubozynski, P.E.	Date: 7/18/2011 8/22/2011	Job No: 165584
To: FDEP - Central District 3319 Maguire Blvd, Suite 232 Orlando, Florida 32803-3767	Phone: 407-893-3327	
Regarding: Financial Responsibility Closure and Long-Term Care Cost Estimates (FY2011)		

We are sending you: ☒ Attached ☐ Under separate cover via _____ the following items

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change Order ☐ Other _____

Copies	Date	No.	Description
4	7/18/2011		Financial Responsibility Closure and Long-Term Care Cost Estimates (FY2011)

These are transmitted as checked below:

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> For approval | <input type="checkbox"/> Approved as submitted | <input type="checkbox"/> Resubmit _____ copies for approval |
| <input type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Submit _____ copies for distribution |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Returned for corrections | <input type="checkbox"/> Return _____ corrected prints |
| <input type="checkbox"/> For review/comment | <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> For bids due _____ | <input type="checkbox"/> Prints returned after loan to us | |

Remarks	Financial Responsibility Closure and Long-Term Care Cost Estimates (FY2011)	
Copy to	File	Signed Cliff Koenig

If enclosures are not as noted, please notify us at once



August 18, 2011

Mr. Tom Lubozynski, P.E.
Section Supervisor
Waste Management Program – Central District
Florida Department of Environmental Protection
Orlando, Florida 32803-3767

RECEIVED
AUG 23 2011
DEP Central Dist.

Re: Financial Assurance Responsibility Report (Fiscal Year 2011)
Tomoka Farms Road Landfill ID# 27540 (North Cell Class I, South Cell,
Class III Landfills) and Plymouth Avenue Landfill ID#27539
Volusia County, Florida

On behalf of Volusia County, we are hereby submitting updated closure and long-term care cost estimates for the above-referenced landfills, fulfilling the requirements of 62-701.630(4) F.A.C.

If you have any questions or comments, please contact Lenny Marion at (386) 947-2952 or lm Marion@co.volusia.fl.us.

Sincerely,
HDR Engineering, Inc.

Cliff Koenig, P.E.
Project Manager

cc: Solid Waste Financial Coordinator, FDEP Tallahassee
Lenny Marion, Volusia County Solid Waste Director

Volusia County Solid Waste System

Financial Responsibility Closure & Long-Term Care Cost Estimates FY 2011

August 18, 2011

RECEIVED

AUG 23 2011

DEP Central Dist.

Prepared for:



Prepared By:

HDR Engineering Inc.
200 W. Forsyth Street,
Suite 800
Jacksonville FL, 32202
904-598-8900

The logo for HDR, consisting of the letters "HDR" in a large, bold, red serif font.

VOLUSIA COUNTY SOLID WASTE SYSTEM
FINANCIAL RESPONSIBILITY
CLOSURE & LONG-TERM CARE COST ESTIMATES
FY 2011

RECEIVED

AUG 23 2011

Prepared for:

DEP. Central Dist.



VOLUSIA COUNTY BOARD OF COUNTY COMMISSIONERS
PUBLIC WORKS DEPARTMENT
RECYCLING AND SOLID WASTE DIVISION
3151 East New York Avenue
DeLand, FL 32724

Prepared by:



HDR ENGINEERING, INC.
200 W Forsyth St, Suite 800
Jacksonville, FL 32202
Telephone: (904) 598-8900 Fax (904) 598-8988

August 2011

SECTION 1.0

Executive Summary

The following report provides an estimate of closing and long-term costs for the various portions of the Volusia County (County) Solid Waste Management System for use by the County in providing assurance of Financial Responsibility as required by the Florida Administrative Code, (FAC) Section 62-701.630.

This report provides the County with an updated estimate of closing and long-term care costs for the North Cell Class I and Class III landfills at the Tomoka Farms Road Solid Waste Management Facility (TFR Facility), and the long-term care costs for the closed South Cell at the TFR Facility and the Plymouth Avenue Landfill. This report addresses costs associated with the currently permitted, constructed and operating landfills, but does not provide costs of current areas permitted for future landfilling. The financial assurance mechanism for expansion disposal areas will be fully funded according to FDEP-approved cost estimates and FDEP rules governing financial assurance responsibility at least sixty days prior to the acceptance of solid waste in these areas (FAC 62-701.630(1)(b)).

The following definitions for the words closing and closure as stated in FAC 62-701 are used in this report.

"Closing": means the time at which a solid waste management facility ceases to accept wastes, and includes those actions taken by the owner or operator of the facility to prepare the facility for any necessary monitoring and maintenance after closing.

"Closure": means the cessation of operation of a solid waste management facility and the act of securing such a facility so that it will pose no significant threat to human health or the environment. This includes closing, long term monitoring, maintenance, and financial responsibility.

This report was prepared assuming that financial responsibility for FY 2011 would be met by the Escrow Accounting Method, as defined in FAC 62-701.630(5). The 2010 closing and long-term care cost estimates, approved by Florida Department of Environmental Protection (FDEP), were adjusted assuming the Class I and Class III landfill areas will be closed in accordance with the requirements of the existing FDEP Operations Permits. In order to comply with the filing requirements of FAC 62-701.630, the FDEP Form 62-701.900(28) was completed for each facility and is included with this report. The estimated escrow funding obligations are presented for each disposal area individually. The closure and long-term care cost estimates were updated this year by adjusting the previously approved costs based on the current year annual inflation factor published by the U.S. Department of Commerce and provided by the FDEP. The current year inflation factor is 1.010 for estimates due September 1, 2011.

Since last year's report:

- The County continued disposal operations in the North Cell Phase I Class I and Class III landfills at the TFR Facility.

-
- The County received a closure permit from FDEP (dated June 27, 2011) to close North Cell Class I landfill areas that have reached their permitted final grades. The County intends to start closure construction by fall 2011 and the closure is expected to be completed by spring 2012. Future Financial Responsibility Reports will reflect this change.
 - The County continued long term care activities at Plymouth Avenue Landfill.

This report includes:

- Updated closing and long-term care cost estimates for the North Cell Class I including the Phase I expansion disposal area at the TFR Facility based on current permit requirements and approved cost estimates adjusted for inflation.
- Updated closing and long-term care cost estimates for the Class III solid waste disposal area at the TFR Facility based on current permit requirements and approved cost estimates adjusted for inflation.
- Updated long-term care cost estimates for the closed South Cell landfill based on current permit requirements and approved cost estimate adjusted for inflation.
- Updated long-term care cost estimates for the Plymouth Avenue Landfill based on current permit requirements and approved cost estimates adjusted for inflation.
- Closure cost estimate for the waste tire temporary storage area at the TFR Facility.

Based on the updated cost estimates for closure and long-term care for the noted facilities and detailed in this report, the County's escrow fund must provide for financial responsibility for FY 2011 in the amount of \$10,472,611.

The FY 2010 Volusia County Landfill Escrow Fund consisting of account GMS 3064C00071 for TFR Facility and account GMS 3064C00070 for Plymouth Avenue Landfill showed a combined balance of \$10,465,759 as of September 30, 2010. The calculated increase to the Volusia County escrow fund for FY2011 financial responsibility equals \$6,852.

In accordance with FDEP requirements, the fund balances reported should indicate balance information for closing and long term care costs separately for each disposal facility. The updated closure cost for each facility and required escrow fund balance for FY 2011 is summarized as follows. The financial assurance forms must be submitted September 1, 2011 to comply with the regulatory deadline specified in FAC 62-701.630(4)(a).

**Summary Estimated Cost & Escrow Analysis
For Closure and Long-Term Care of Landfills
FY 2011 Financial Assurance Report
Volusia County, Florida**

Facility	South Cell Landfill	North Cell Class I Landfill	Class III Landfill	Plymouth Ave. Landfill	Used Tire Area Closing Tomoka Landfill	Total Cost
Estimated Updated Closing Cost (CE)	\$ -	\$ 10,824,720	\$ 7,941,153	\$ -	\$ 10,718	\$ 18,776,591
Months of Exhausted Design Life (DE) ^(1,2)	—	147	159	—	—	—
Months of Total Design Life (DL) ⁽²⁾	—	214	457	—	—	—
Documented Closure Expenses (E)	—	0	0	—	0	—
Remaining Years of Long-term Care	30	30	30	19	0	—
Estimated Updated Post-closure LTC Cost	\$ 5,144,149	\$ -	\$ -	\$ 1,718,774	\$ -	\$ 6,862,923
Escrow Account Balance (period ending September 30, 2010) ⁽³⁾	\$ 169,799	\$ 7,310,149	\$ 2,861,727	\$ 89,579	\$ 34,505	\$ 10,465,759
Total Escrow Funding Required ⁽⁴⁾	\$ 171,472	\$ 7,436,815	\$ 2,763,145	\$ 90,462	\$ 10,718	\$ 10,472,611
Total Estimated Increase/Decrease for FY-10 Requirement	\$ 1,673	\$ 126,666	\$ (98,582)	\$ 883	\$ (23,787)	\$ 6,852
Financial Responsibility Escrow Account Balance for FY-10 FDEP Requirement						\$ 10,472,611

Notes:

This table does not account for financial responsibility for Phase II expansion of the North Cell Class I landfill.

1) Exhausted design life as of September 1, 2011.

2) North/Phase I Landfill: opening date is June 1999 and closure date of February 2017 as calculated in Table 3 (147 months of exhausted life, 213 months of design life). Class III landfill - opening date is June 1998 and closure date of June 2037 as calculated in Table 4 (159 months of exhausted life, 456 months of design life).

3) See documentation from James & Moore shown in Attachment A. Keeping with last year's report methodology, it was assumed that the escrow funding required for closing the waste tire facility is equal to the calculated cost of disposing the waste tires. The cost for closing the waste tire area was calculated by multiplying 125 tons of tires at average expense of disposing rimmed tires (\$74.82/ton), de-rimmed tires (\$52.41/ton) and over-sized tires (\$130/ton). Quantity of waste tires (125 tons) is calculated by averaging waste tire quantities reported in last four "Quarterly Waste Tire Report & Inventory Update" reports submitted to the department (from 2nd quarter 2010 to 1st quarter 2011).

4) The escrow account funding required for closure of active sites was calculated using the formula $[CE \times DE/DL] - E$. Funding requirements for sites in post-closure care are required to provide funding for one year.



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form
For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Plymouth Avenue Landfill WACS ID: 27539
 Permit Application or Consent Order No.: SF64-0127461-002 Expiration Date: 11/29/2016
 Facility Address: Northeast of the intersection of Plymouth Ave and Grand Ave, west of DeLand, Florida
 Permittee or Owner/Operator: Volusia County Solid Waste Division
 Mailing Address: 3151 East New York Avenue, DeLand, Florida 32724

Latitude: 29 ° 02 ' 35 " Longitude: 81 ° 20 ' 50 "
 Coordinate Method: AutoCAD/GPS Datum: NAD 1983/90 (east)
 Collected by: J.E. Zapert Company/Affiliation: Sliger & Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
Plymouth LF	79.6	1940s	approx. 60 years	NA	1996	10/13/1999

Total disposal unit acreage included in this estimate: _____ Closure: NA Long-Term Care: 39

Facility type: ☒ Class I ☒ Class III ☒ C&D Debris Disposal
 (Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☐ Insurance Certificate ☒ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-5794
850-595-8360

Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pky.
Temple Terrace, FL 33637
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-681-6600

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate adjustment below.

☒ (a) Inflation Factor Adjustment

☐ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on the Department approved closing cost estimate dated:

Latest Department Approved Closing Cost Estimate:		Current Year Inflation Factor, e.g. 1.02		Inflation Adjusted Closing Cost Estimate:
	x	1.01	=	

This adjustment is based on the Department approved long-term care cost estimate dated:

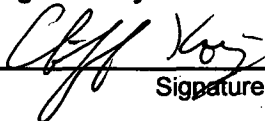
9/23/2010

Latest Department Approved Annual Long-Term Care Cost Estimate:		Current Year Inflation Factor, e.g. 1.02		Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$89,566.15	x	1.01	=	\$90,461.81
Number of Years of Long Term Care Remaining:			x	19
Inflation Adjusted Long-Term Care Cost Estimate:			=	\$1,718,774.42

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)


Signature

Cliff Koenig, P.E., Project Manager
Name & Title

8-17-2011
Date

(904) 598-8900
Telephone Number

200 W Forsyth St, Ste 800
Address

Jacksonville, FL 32202
City, State, Zip Code

Cliff.Koenig@hdrinc.com
E-Mail Address



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Print Form

Reset Form

DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form
For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Tomoka Farms Road Landfill- South Cell WACS ID: 27540
Permit Application or Consent Order No.: SF64-0078767-022 Expiration Date: 3/3/2013
Facility Address: 1990 Tomoka Farms Road, Daytona Beach, Florida
Permittee or Owner/Operator: Volusia County Solid Waste Division
Mailing Address: 3151 East New York Avenue, DeLand, Florida 32724

Latitude: 29 ° 07 ' 50 " Longitude: 81 ° 06 ' 02 "
Coordinate Method: AutoCAD/GPS Datum: NAD 1983/90 (east)
Collected by: J.E. Zapert Company/Affiliation: Sliger & Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
South Cell	114	June 1978	Approx. 23 years	NA	2001	2001

Total disposal unit acreage included in this estimate: _____ Closure: NA Long-Term Care: 114

Facility type: ☒ Class I ☒ Class III ☒ C&D Debris Disposal
(Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- | | | |
|--|--|--|
| <input type="checkbox"/> Letter of Credit* | <input type="checkbox"/> Insurance Certificate | <input checked="" type="checkbox"/> Escrow Account |
| <input type="checkbox"/> Performance Bond* | <input type="checkbox"/> Financial Test | <input type="checkbox"/> Form 29 (FA Deferral) |
| <input type="checkbox"/> Guarantee Bond* | <input type="checkbox"/> Trust Fund Agreement | |

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-5794
850-595-8360

Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pkwy.
Tempe Terrace, FL 33637
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-681-6600

III. ESTIMATE ADJUSTMENT

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☐ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on the Department approved closing cost estimate dated:

Latest Department Approved
Closing Cost Estimate:

Current Year Inflation
Factor, e.g. 1.02

Inflation Adjusted Closing
Cost Estimate:

x

1.01

=

This adjustment is based on the Department approved long-term care cost estimate dated:

9/23/2010

Latest Department Approved
Annual Long-Term Care
Cost Estimate:

Current Year Inflation
Factor, e.g. 1.02

Inflation Adjusted Annual
Long-Term Care Cost
Estimate:

\$169,773.89

x

1.01

=

\$171,471.63

Number of Years of Long Term Care Remaining:

x

30

Inflation Adjusted Long-Term Care Cost Estimate:

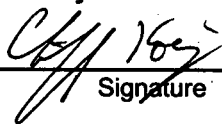
=

\$5,144,148.87

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)


Signature

200 W Forsyth St, Ste 800

Address

Cliff Koenig, P.E., Project Manager

Name & Title

Jacksonville, FL 32202

City, State, Zip Code

8-17-2011

Date

Cliff.Koenig@hdrinc.com

E-Mail Address

(904) 598-8900

Telephone Number



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form
For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Tomoka Farms Road Landfill- Class III Landfill WACS ID: 27540
 Permit Application or Consent Order No.: SO64-0078767-019 Expiration Date: 10/9/2014
 Facility Address: 1990 Tomoka Farms Road, Daytona Beach, Florida
 Permittee or Owner/Operator: Volusia County Solid Waste Division
 Mailing Address: 3151 East New York Avenue, DeLand, Florida 32724

Latitude: 29° 07' 53" Longitude: 81° 05' 31"
 Coordinate Method: AutoCAD/GPS Datum: NAD 1983/90 (east)
 Collected by: J.E. Zapert Company/Affiliation: Sliger & Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
Class III LF	88	June 1998	12.25 years	24.83 years	NA	NA

Total disposal unit acreage included in this estimate: Closure: 88 Long-Term Care: 88

Facility type: ☐ Class I ☒ Class III ☐ C&D Debris Disposal
 (Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☐ Insurance Certificate ☒ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

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This adjustment is based on the Department approved closing cost estimate dated:

9/23/2010

Latest Department Approved
Closing Cost Estimate:

Current Year Inflation
Factor, e.g. 1.02

Inflation Adjusted Closing
Cost Estimate:

\$7,862,527.61

x

1.01

=

\$7,941,152.89

This adjustment is based on the Department approved long-term care cost estimate dated:

9/23/2010

Latest Department Approved
Annual Long-Term Care
Cost Estimate:

Current Year Inflation
Factor, e.g. 1.02

Inflation Adjusted Annual
Long-Term Care Cost
Estimate:

\$91,888.72

x

1.01

=

\$92,807.61

Number of Years of Long Term Care Remaining:

x

30

Inflation Adjusted Long-Term Care Cost Estimate:

=

\$2,784,228.22

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)


Signature

200 W Forsyth St, Ste 800

Address

Cliff Koenig, P.E., Project Manager

Name & Title

Jacksonville, FL 32202

City, State, Zip Code

8-17-2011

Date

Cliff.Koenig@hdrinc.com

E-Mail Address

(904) 598-8900

Telephone Number



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Print Form

Reset Form

DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form
For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Tomoka Farms Road Landfill-North Cell, Phase I, Class I WACS ID: 27540
Permit Application or Consent Order No.: SF64-0078767-0023 Expiration Date: 3/3/2013
Facility Address: 1990 Tomoka Farms Road, Daytona Beach, Florida
Permittee or Owner/Operator: Volusia County Solid Waste Division
Mailing Address: 3151 East New York Avenue, DeLand, Florida 32724

Latitude: 29° 07' 50" Longitude: 81° 06' 02"
Coordinate Method: AutoCAD/GPS Datum: NAD 1983/90 (east)
Collected by: J.E. Zapert Company/Affiliation: Sliger & Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
North Cell	67	June 1999	11.25 years	5.58 years	NA	NA

Total disposal unit acreage included in this estimate: _____ Closure: 67 Long-Term Care: 67

Facility type: ☒ Class I ☐ Class III ☐ C&D Debris Disposal
(Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- | | | |
|--|--|--|
| <input type="checkbox"/> Letter of Credit* | <input type="checkbox"/> Insurance Certificate | <input checked="" type="checkbox"/> Escrow Account |
| <input type="checkbox"/> Performance Bond* | <input type="checkbox"/> Financial Test | <input type="checkbox"/> Form 29 (FA Deferral) |
| <input type="checkbox"/> Guarantee Bond* | <input type="checkbox"/> Trust Fund Agreement | |

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561-681-6600

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate adjustment below.

☒ (a) Inflation Factor Adjustment

☐ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

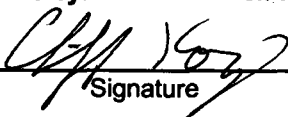
This adjustment is based on the Department approved closing cost estimate dated:		9/23/2010
Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Closing Cost Estimate:
\$10,717,544.26	× 1.01	= \$10,824,719.70

This adjustment is based on the Department approved long-term care cost estimate dated:		9/23/2010
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$125,705.44	× 1.01	= \$126,962.49
Number of Years of Long Term Care Remaining:	×	30
Inflation Adjusted Long-Term Care Cost Estimate:	=	\$3,808,874.83

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)


Signature

200 W Forsyth St, Ste 800
Address

Cliff Koenig, P.E., Project Manager
Name & Title

Jacksonville, FL 32202
City, State, Zip Code

8-17-2011
Date

Cliff.Koenig@hdrinc.com
E-Mail Address

(904) 598-8900
Telephone Number

SECTION 2.0

Regulatory Requirements

FAC 62-701.630 addresses financial responsibility requirements for landfills and other solid waste management facilities. Government-owned landfills can demonstrate financial responsibility in several ways. Mechanisms available include establishment of an escrow account, use of the corporate guarantee (financial test), surety bonds, certificates of deposit, securities, letters of credit, trust fund agreements, and closure insurance.

Volusia County has used the escrow accounting mechanism to provide for financial responsibility. FAC 62-701.630 allows government-owned landfills to demonstrate financial responsibility for the annual cost of long-term care one-year prior to the actual final closure. The disposal areas at the TFR Facility and the Plymouth Avenue Landfill are required to have long-term care for 30 years after the landfill has been certified closed by the FDEP.

In March 1996, the U.S. Environmental Protection Agency (EPA) promulgated *Standards of Performance, Emission Guidelines and Compliance Times, and New Source Performance Standards* for municipal solid waste (MSW) landfills. These regulations brought MSW landfills under the direct control of the Clean Air Act (CAA) and require the installation of landfill gas (LFG) emissions controls for the Volusia County Tomoka Farms Road Landfill. Costs for implementation of the LFG control systems for the TFR Facility has been included in the closure cost estimates. The current FDEP closure permit for the Plymouth Avenue Landfill does not require a landfill gas collection system and costs for such system is not allocated in the updated long-term care cost estimates.

The FDEP establishes the method for estimating closing and long-term care costs for financial responsibility in FAC 62-701.630 and referencing and adopting 40 CFR, Part 264, Subpart H. These federal regulations specify that closing and long-term care cost estimates may be made by:

- Recalculating the maximum costs of closing and long-term care in current dollars; or,
- Using an inflation factor derived from the most recent Implicit Price Deflator for Gross Domestic Product published by the U.S. Department of Commerce in its *Economic Report of the President* to inflate cost estimates from the prior year.

The FDEP requirements for financial responsibility annual adjustments were met for the Class III, North Cell Class I and the closed South Cell landfills at the TFR Facility and the closed Plymouth Avenue Landfill by updating the 2010 FDEP-approved cost estimates with the annual inflation factor. An inflation rate of 1.0% was used for this year's financial responsibility report as provided by the FDEP. This value was obtained from the FDEP Solid Waste Financial Responsibility webpage.

SECTION 3.0

Methodology

Closure and long-term care costs for the North Cell Class I, Class III landfill and the closed South Cell at TFR Facility and the Plymouth Avenue Landfill were adjusted for inflation based on the FY2010 Financial Responsibility Closure and Long-Term Care Cost Estimates Report cost estimates approved by the FDEP. This inflationary adjustment was applied to cost estimates previously approved and prepared based on current permit plans and permit conditions. No modifications to the TFR Class I, TFR Class III, or Plymouth landfills or their permits have occurred since the previous year's financial assurance submittal that would necessitate a recalculation of their financial assurance responsibility.

FDEP Form 62-701.900(28) was submitted for each facility individually with the updated estimated cost estimates for closure and long-term care. All additional data including population data, airspace depletion rate data, and life expectancy of the current permitted landfills are presented in Section 4.0.

Population projections and a six-year-averaged per capita landfill capacity utilization rate for Class I and Class III solid waste is used to project future landfill airspace utilization rates. The amount of permitted airspace utilized since the previous financial assurance report was determined by comparing new aerial topographic mapping flown in May 2011 with last year's aerial topographic survey flown in April 2010. This method takes into account the landfill volume used for the required daily and intermediate cover material and the landfill volume gained due to waste decomposition and compaction, as well as other factors which may impact permitted disposal capacity and the projection of remaining life.

Table 1 provides updated population projections for the Class I and Class III solid waste service areas. The contributing population for Class I solid waste is assumed to be the population of combined Volusia and Flagler Counties although the flow of Class I solid waste from Flagler County to the Volusia County TFR Facility may discontinue in the future. The contributing population for Class III solid waste was assumed to be Volusia County. The population projections are based on the data supplied by the Office of Economic and Demographic Research (EDR).

Table 2 presents the per capita permitted disposal capacity depletion rate. Tables 3 and 4 provide the permitted airspace depletion analysis for the North Cell Class I and Class III landfills. Table 5 provides a summary of the calculated closure dates and long-term care periods of the landfills. Table 6 summarizes the costs and required funding for closure and long-term care of each facility and provides an analysis of annual contributions to fund closure.

Although permitted for construction, the Phase II expansion has not yet been constructed and certified by the FDEP for waste disposal. Therefore, the Phase II expansion was not included in the 2011 FDEP inflationary adjustments for the North Cell Class I landfill's financial assurance responsibility and it was not factored into the site life calculations. Per FAC 62-701.630(1)(b), the financial assurance mechanism for the Phase II expansion area will be fully funded according to FDEP-approved cost estimates and FDEP rules governing financial assurance responsibility at least sixty days prior to the acceptance of solid waste in these areas. Based on volume calculation, the Phase II expansion will increase the total waste capacity by 3.8 million cubic yards which, based on future population projections and per capita utilizations, increases the site life eight years.

The TFR Facility waste tire storage area is a stand-alone waste tire drop-off facility where tires are loaded into containers for transportation to a permitted off-site processing facility. This operation is anticipated to remain as long as the other solid waste activities take place on the property. Since this length of time is not now defined, it is assumed that the closing date will be the same as the closing date for the TFR Solid

Waste Management Facility. The cost estimate for closing the TFR Facility waste tire storage area was assumed to be the cost of disposing the quantity of tires stored at the facility. This cost was calculated by multiplying 125 tons of tires by the cost of hauling and disposal of tires by a third party contractor currently \$74.82/ton for rimmed tires, \$52.41/ton for de-rimmed tires and \$130.00/ton for oversized tires. The quantity of waste tires (125 tons) was calculated by averaging waste tire quantities reported in last four *Quarterly Waste Tire Report & Inventory Update* reports submitted to the department (from 2nd quarter 2010 to 1st quarter 2011).

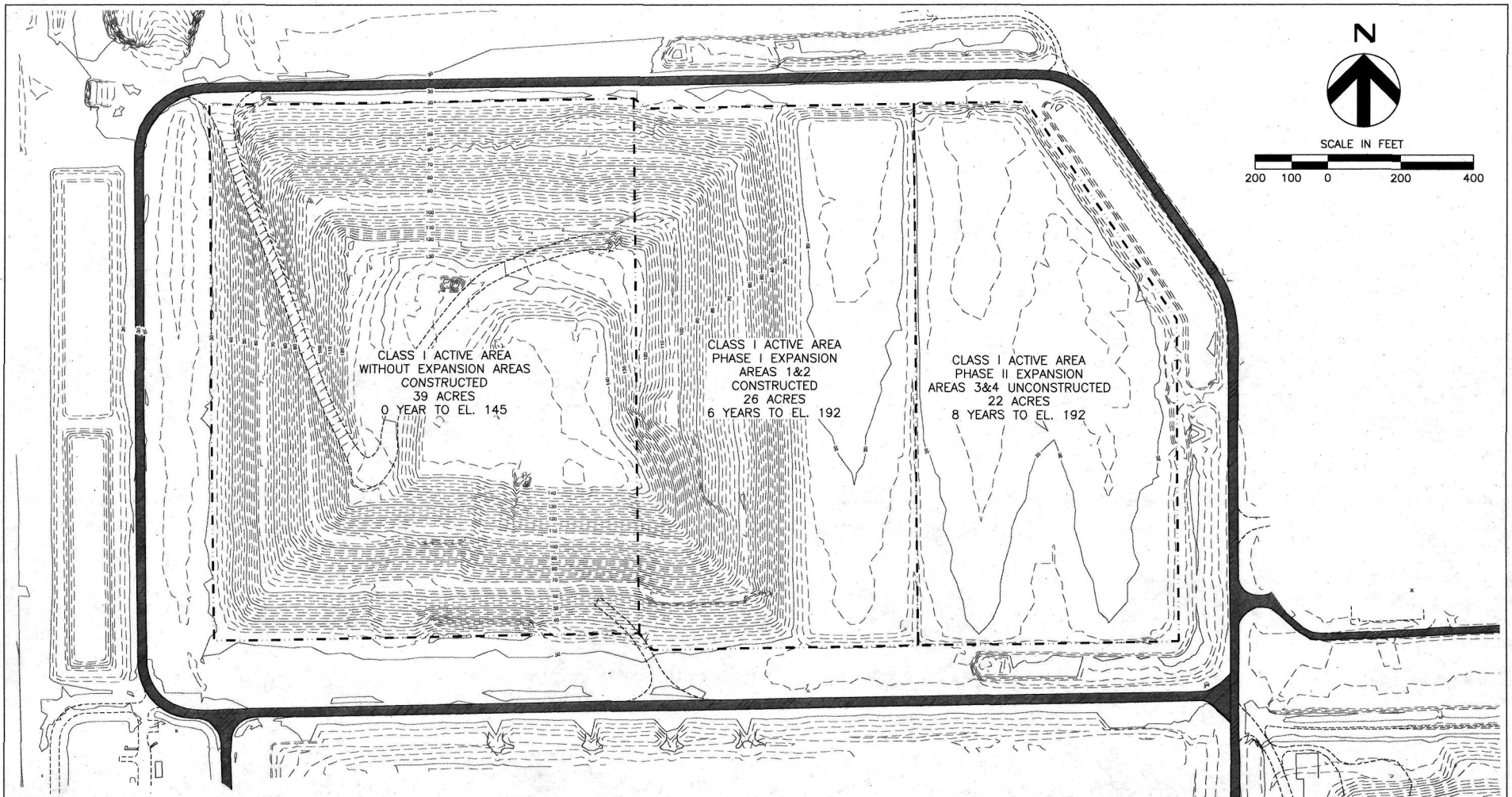
SECTION 4.0

Figures and Tables

The figures and tables are organized as follows:

<u>Figure Number</u>	<u>Title</u>
1	Existing Topographic Survey (May 2011) - Class I North Cell – Tomoka Farms Road Landfill
2	Final Grading Plan without Phase II Expansion – Class I North Cell– Tomoka Farms Road Landfill
3	Final Grading Plan with Phase II Expansion – Class I North Cell – Tomoka Farms Road Landfill
4	Existing Topographic Survey (May 2011) - Class III Landfill-Tomoka Farms Road Landfill
5	Final Grading Plan - Class III Landfill – Tomoka Farms Road Landfill
6	Aerial Site Plan (May 2011) – Tomoka Farms Road Landfill

<u>Table Number</u>	<u>Title</u>
1	Population Projections of Wasteshed Service Areas
2	Annual Rate of Landfill Capacity Utilization
3	North Cell Class I Landfill - Projected Capacity Utilization
4	Class III Landfill - Projected Capacity Utilization
5	Summary of Closing & Final Closure of Landfills
6	Summary of Estimated Cost and Escrow Analysis



NOTES:

1. AERIAL IMAGERY WAS TAKEN FROM AERIAL SURVEY PERFORMED BY AERIAL CARTOGRAPHICS OF AMERICA ON MAY 7, 2011.
2. BOUNDARIES ARE APPROXIMATE.

HDR

**EXISTING TOPOGRAPHIC SURVEY
(MAY 2011)
CLASS I NORTH CELL**

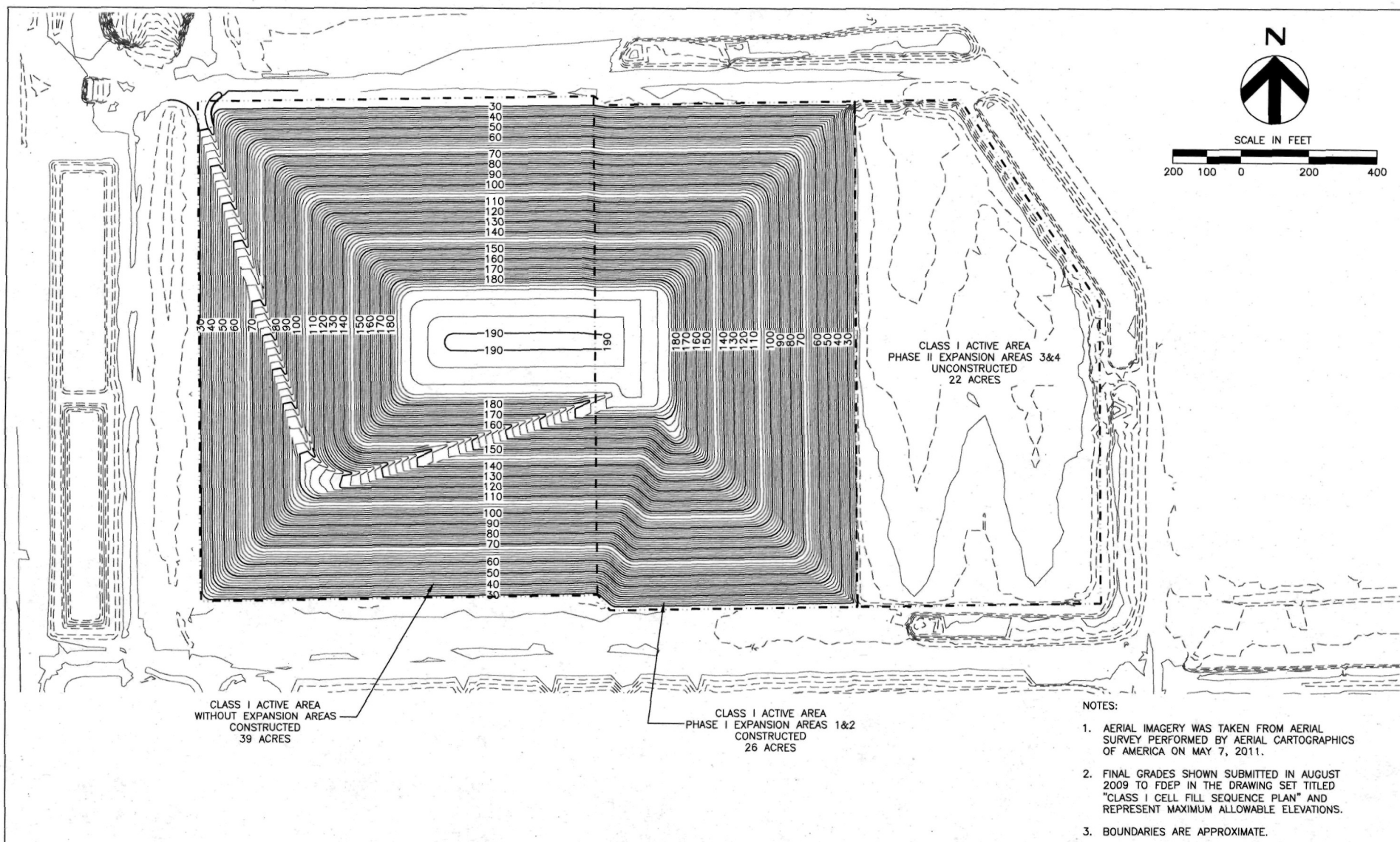
VOLUSIA COUNTY, FL

DATE

07/11

FIGURE

FIGURE 1



HDR

**FINAL GRADING PLAN
WITHOUT PHASE II EXPANSION
CLASS I NORTH CELL**

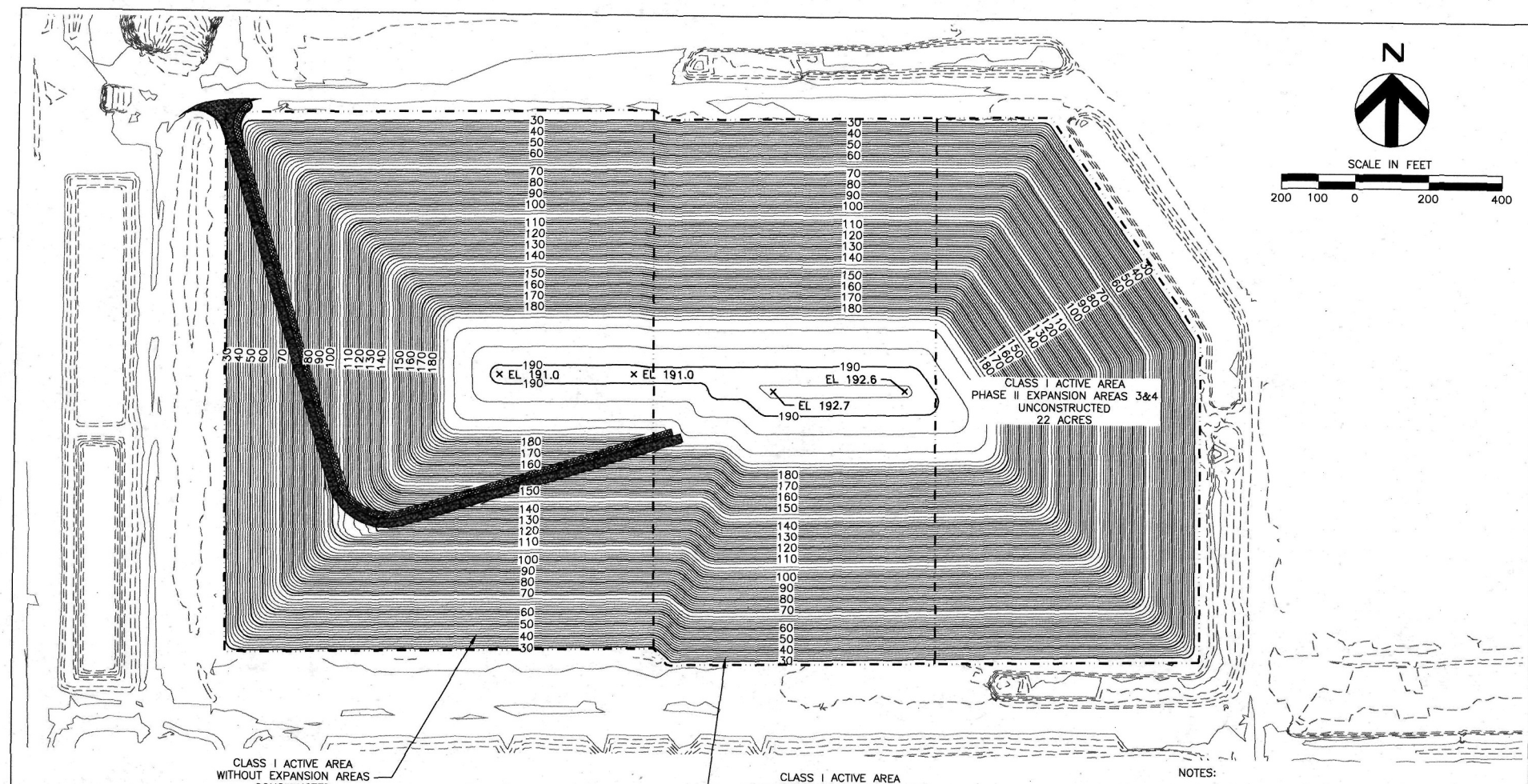
VOLUSIA COUNTY, FL

DATE

07/11

FIGURE

FIGURE 2



NOTES:

1. AERIAL IMAGERY WAS TAKEN FROM AERIAL SURVEY PERFORMED BY AERIAL CARTOGRAPHICS OF AMERICA ON MAY 7, 2011.
2. FINAL GRADES SHOWN SUBMITTED IN AUGUST 2009 TO FDEP IN THE DRAWING SET TITLED "CLASS I CELL FILL SEQUENCE PLAN" AND REPRESENT MAXIMUM ALLOWABLE ELEVATIONS.
3. BOUNDARIES ARE APPROXIMATE.

HDR

**FINAL GRADING PLAN
WITH PHASE II EXPANSION
CLASS I NORTH CELL**

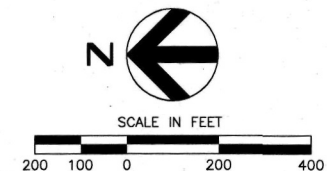
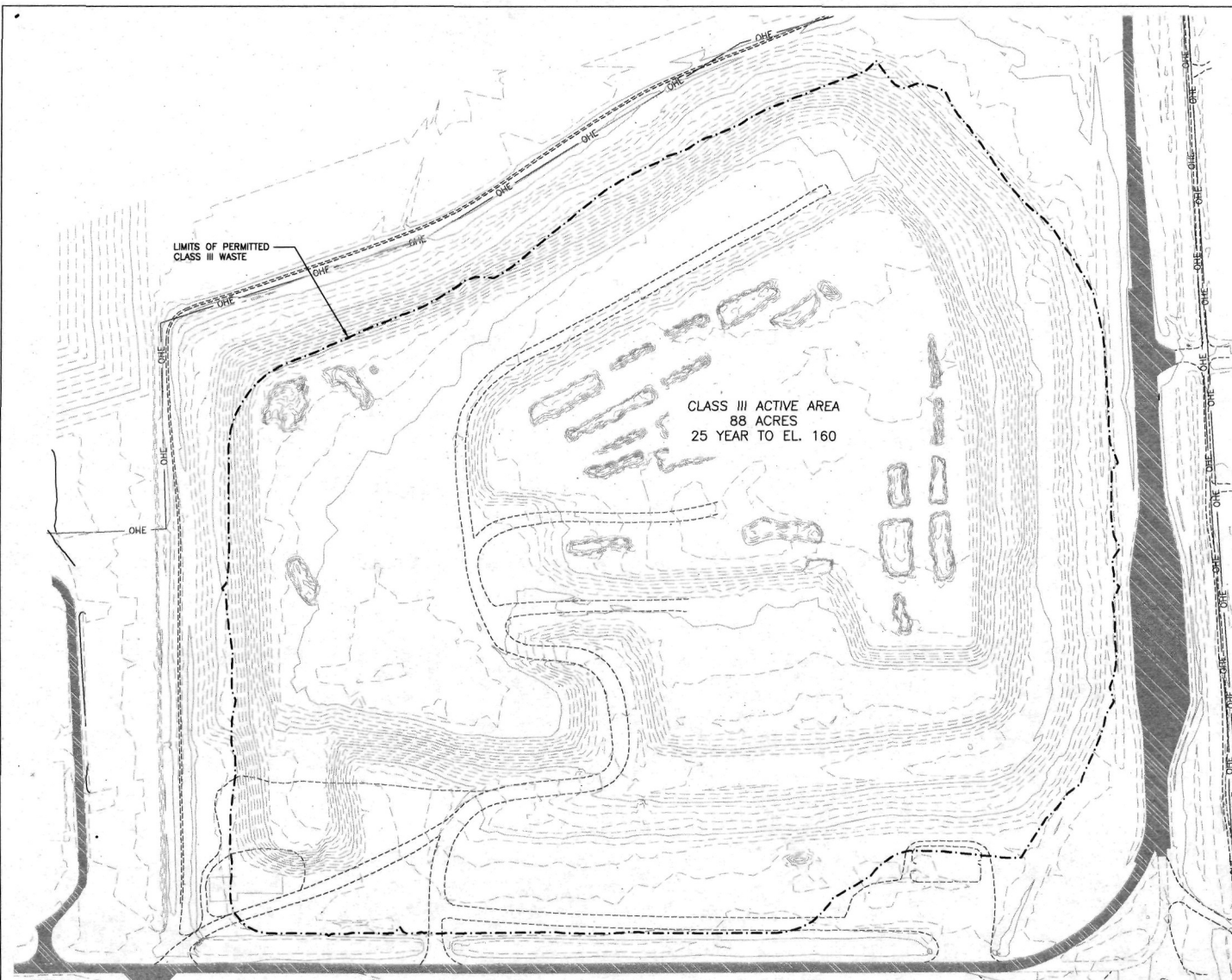
VOLUSIA COUNTY, FL

DATE

07/11

FIGURE

FIGURE 3



NOTES:

1. AERIAL IMAGERY WAS TAKEN FROM AERIAL SURVEY PERFORMED BY AERIAL CARTOGRAPHICS OF AMERICA ON MAY 7, 2011.
2. BOUNDARIES ARE APPROXIMATE.

HDR

**EXISTING TOPOGRAPHIC SURVEY
(MAY 2011)
CLASS III LANDFILL**

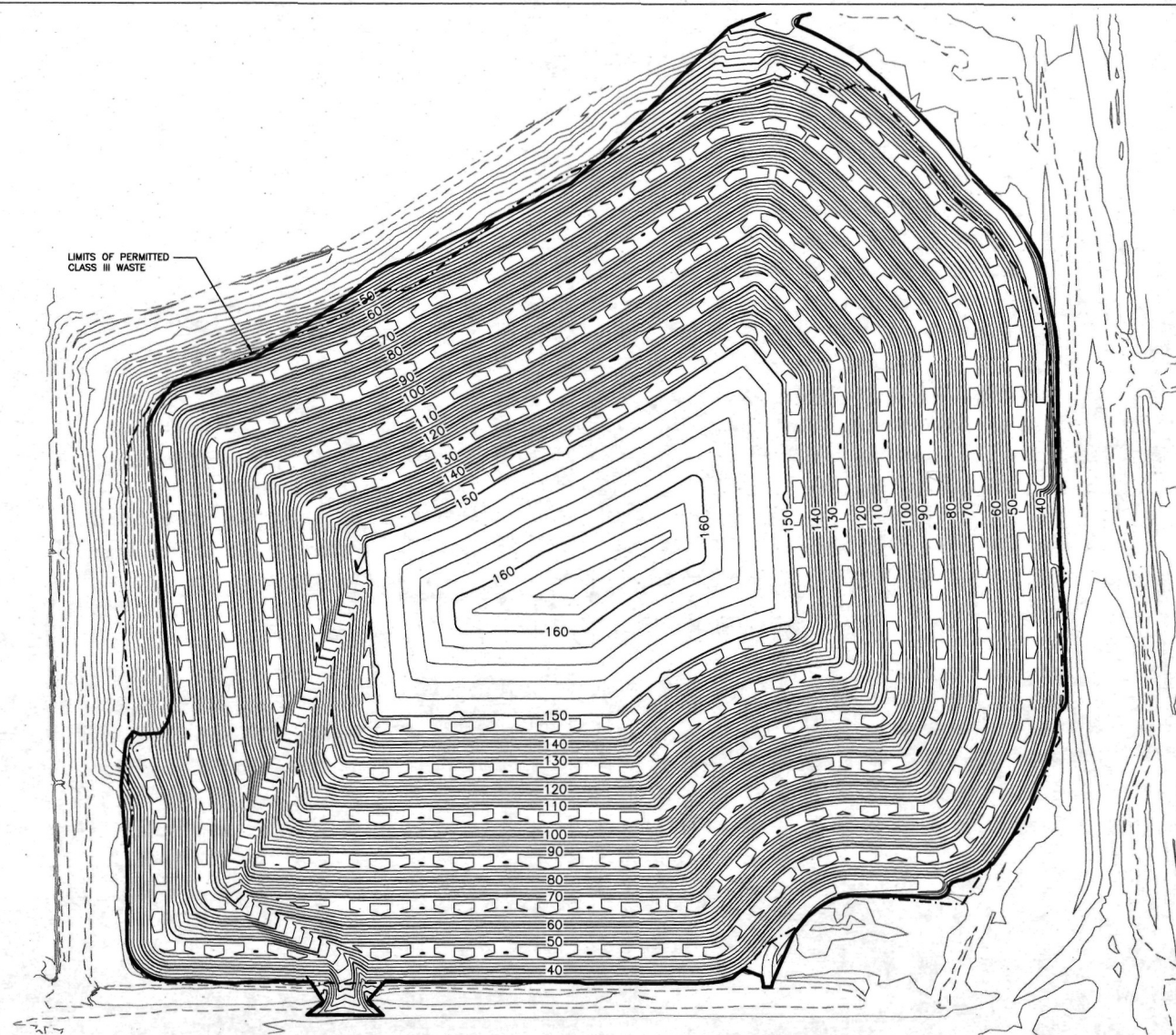
VOLUSIA COUNTY, FL

DATE

07/11

FIGURE

FIGURE 4



SCALE IN FEET
200 100 0 200 400

LIMITS OF PERMITTED
CLASS III WASTE

NOTES:

1. AERIAL IMAGERY WAS TAKEN FROM AERIAL SURVEY PERFORMED BY AERIAL CARTOGRAPHICS OF AMERICA ON MAY 7, 2011.
2. FINAL GRADE CONTOURS PROVIDED BY SCS ENGINEERS.

HDR

**FINAL GRADING PLAN
CLASS III LANDFILL**

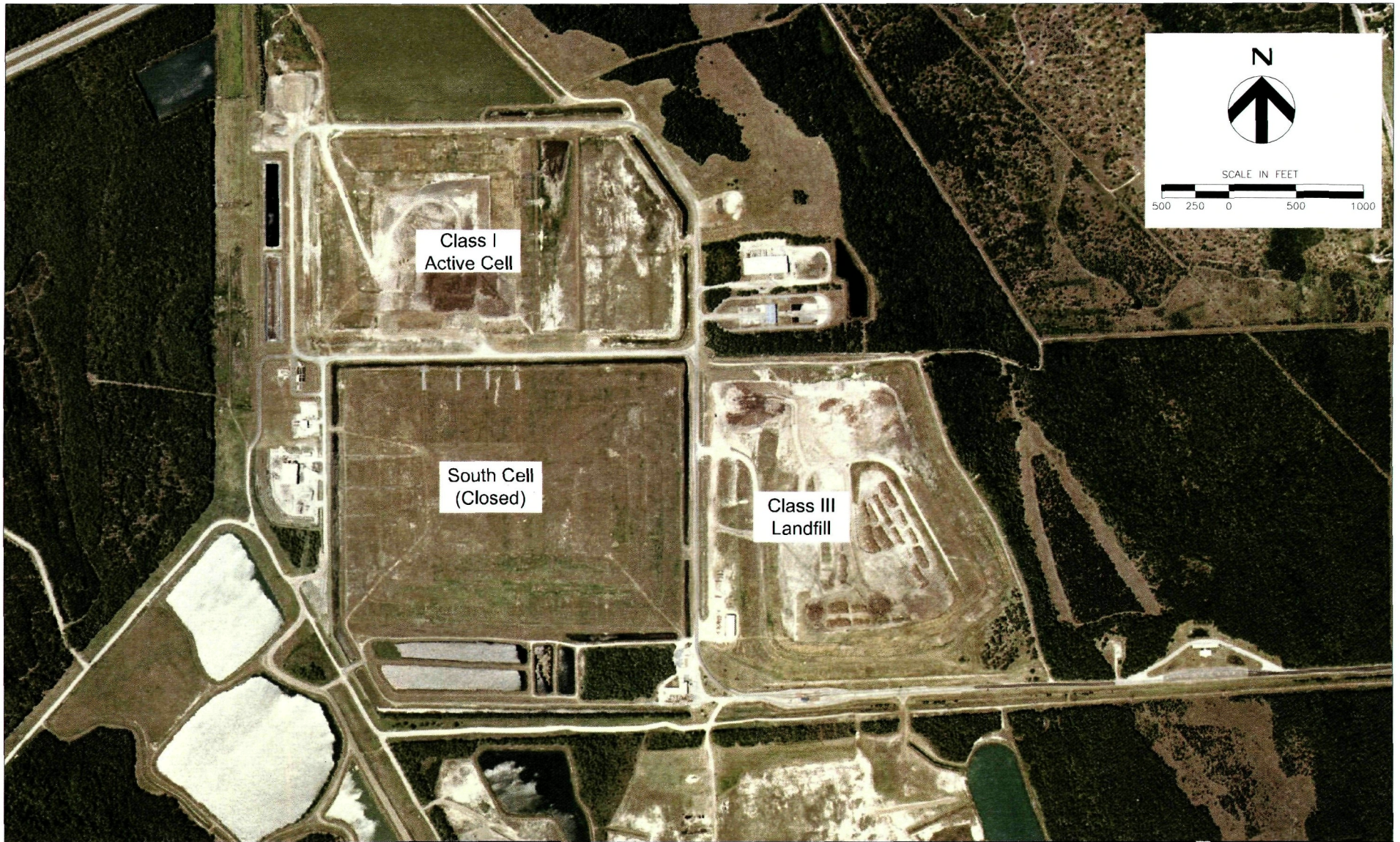
VOLUSIA COUNTY, FL

DATE

07/11

FIGURE

FIGURE 5



HDR

**AERIAL SITE PLAN
(MAY 2011)**

VOLUSIA COUNTY, FL

DATE

07/11

FIGURE

FIGURE 6

**Table 1: Population Projections of Wasteshed Service Areas
FY 2011 Financial Assurance Report
Volusia County, Florida**

Year	Service Area Populations		Class I Wasteshed (Volusia and Flagler Counties)	Class III Wasteshed (Volusia County)
	Volusia County	Flagler County		
2001	437,406	55,880	493,286	437,406
2002	443,498	58,820	502,318	443,498
2003	449,589	61,759	511,348	449,589
2004	455,681	64,699	520,380	455,681
2005	473,801	67,639	541,440	473,801
2006	480,921	70,579	551,500	480,921
2007	508,014	93,568	601,582	508,014
2008	510,109	96,172	606,281	510,109
2009	507,105	94,901	602,006	507,105
2010	506,528	95,671	602,199	506,528
2011	507,603	97,753	605,356	507,603
2012	510,392	100,885	611,277	510,392
2013	516,210	105,130	621,340	516,210
2014	523,111	109,918	633,029	523,111
2015	529,471	114,709	644,180	529,471
2016	535,536	119,385	654,921	535,536
2017	541,492	123,969	665,461	541,492
2018	547,330	128,477	675,807	547,330
2019	553,103	132,942	686,045	553,103
2020	558,840	137,389	696,229	558,840
2021	564,584	141,844	706,428	564,584
2022	570,285	146,293	716,578	570,285
2023	575,944	150,728	726,672	575,944
2024	581,543	155,138	736,681	581,543
2025	587,081	159,517	746,598	587,081
2026	592,505	163,844	756,349	592,505
2027	597,828	168,120	765,948	597,828
2028	603,048	172,341	775,389	603,048
2029	608,180	176,509	784,689	608,180
2030	613,185	180,611	793,796	613,185
2031	619,118	186,532	805,649	619,118
2032	625,108	192,646	817,754	625,108
2033	631,156	198,962	830,117	631,156
2034	637,262	205,484	842,746	637,262
2035	643,428	212,220	855,648	643,428
2036	649,653	219,177	868,830	649,653

Notes:

Population estimates for years 2001 through 2009 were taken from Table 1 of HDR Engineering's FY2010 Financial Responsibility Closure & Long-term Care Cost Estimates, dated August 2010. The Office of Economic and Demographic Research (EDR) is source for Volusia County and Flagler County population estimates for 2010 through 2030. Population estimates for 2031 and 2036 are based upon the average annual population growth rate from 2010 through 2030.

**Table 2: Annual Rate of Landfill Capacity Utilization
FY 2011 Financial Assurance Report
Volusia County, Florida**

A. Class I Landfill-North Cell

Year ⁽¹⁾	Annual Utilization ⁽²⁾ (CY)	Population of Wasteshed	Rate of Class I Landfill Space Utilization Per Capita (CY/Yr.)
2005	401,869	541,440	0.742
2006	547,774	551,500	0.993
2007	568,418	601,582	0.945
2008	393,429	606,281	0.649
2009	321,980	602,006	0.535
2010	266,219	602,199	0.442
Projected Rate of Class I Landfill Space Utilization Per Capita (CY/Yr) ⁽⁵⁾			0.718

B. Class III Landfill

Year ⁽¹⁾	Annual Utilization ⁽²⁾ (CY)	Population of Wasteshed	Rate of Class III Landfill Space Utilization Per Capita (CY/Yr)
2005	131,136	473,801	0.277
2006	311,404	480,921	0.648
2007	212,703	508,014	0.419
2008	84,739	510,109	0.166
2009	51,831	507,105	0.102
2010	145,471	506,528	0.287
Projected Rate of Class III Landfill Space Utilization Per Capita (CY/Yr) ⁽⁵⁾			0.316

Notes:

1) The year shown refers to the period in between the annual aerial topographic surveys (i.e. year 2006 refers to April 2006 to March 2007). For the year 2010, the annual estimated airspace, 288,100 cubic yards for the Class I North Cell and 157,428 cubic yards for the Class III Landfill, was divided by 1.0822 to account for the 395 days in between aerial photograph dates (April 7, 2010 to May 7, 2011).

2) Annual utilization for the years 2005 through 2009 is provided by HDR Engineering's 2010 Financial Assurance Report dated August 2010. The Class I 2010 annual utilization was calculated by Autodesk AutoCAD Civil 3D using the April 7, 2010 and May 7, 2011 aerial topographic surveys by Aerial Cartographic of America, Inc. The extent of the area used in the volume calculation was the "Existing Edge of Liner" Final Cover/Closure Site Plan SCS Engineers, 7/24/2009. The boundary was truncated at the 29' contour on the northern boundary of the original North Cell. The boundary used for the Class III landfill volume calculation was "the limits of permitted Class III" line shown on the SCS Engineers permit renewal drawing dated June 2009. The western margin of the permitted Class III boundary was truncated (approximately 10 acres) since activities unrelated to waste disposal, compaction or decomposition (i.e. removal of yard trash stockpiles) only occurred in this area.

3) The increase in Class I and Class III solid waste landfill space utilization for 2006 may be attributed to impacts of beachside resort construction.

4) The decrease in Class III solid waste landfill per capita space utilization for 2008 and 2009 tonnages may be attributed to downturn in construction.

5) The projected rate of landfill space utilization is assumed to be the average rate of per capita utilization for the past six years.

6) The estimated annual landfill space utilization includes landfill space lost due to the use of required cover material and the space gained due to compaction and decomposition of waste.

**Table 3: North Cell Class I Landfill - Projected Capacity Utilization
FY 2011 Financial Assurance Report
Volusia County, Florida**

Year ⁽¹⁾	Time Period	Estimated Volume Utilized (CY)	Estimated Cumulative Volume Utilized (CY)	Permitted Disposal Capacity Remaining without Phase II Expansion (CY)	Percent of Permitted Disposal Capacity Used ⁽²⁾
2009 ⁽³⁾	4/8/09 to 4/7/10	—	—	2,911,473	66%
2010 ⁽⁴⁾	4/8/10 to 5/7/11	266,219	5,865,743	2,628,344	69%
2010	5/8/11 to 9/30/11	171,767	6,037,510	2,456,577	71%
2011	10/1/11 to 9/30/12	434,646	6,472,156	2,021,931	76%
2012	10/1/12 to 9/30/13	438,897	6,911,052	1,583,035	81%
2013	10/1/13 to 9/30/14	446,122	7,357,175	1,136,912	87%
2014	10/1/14 to 9/30/15	454,515	7,811,689	682,398	92%
2015	10/1/15 to 9/30/16	462,521	8,274,211	219,876	97%
2016	10/1/16 to 3/20/17	219,876	8,494,087	0	100%
				Calculated Closure Date	March 2017

Notes:

1) Year generally represents October 1 to September 30 (i.e. year 2012 is from October 1, 2012 to September 31, 2013).

2) The total disposal capacity, including daily/intermediate cover, was calculated to be 8,494,087 cubic yards (assuming 211,722 cubic yards of final cover). The Phase 1 expansion basegrades utilized in this calculation were from an as-built drawing by Map-Tech dated October 4, 2005. The basegrades in the original North Cell were modeled from design basegrades from SCS Engineers. The final grade contours shown on Figure 2 were generated based on the July 24, 2009 Final Cover/Closure Site Plan drawing by SCS Engineers. The drawing was modified to exclude Phase II Expansion airspace.

3) Source is 2010 Financial Responsibility Report, HDR Engineering dated August 2010.

4) The volume capacity remaining as of the May 7, 2011 topo survey was calculated to be approximately 2,840,066 cubic yards. This volume was calculated using the final cap grade contours (see Note #2) and the May 7, 2011 aerial topographic survey. The final cover volume was estimated to be 211,722 cubic yards which assumes a traditional soil cover for the entire closure area. The remaining capacity, 2,628,344 cubic yards, was assumed to be utilized for waste disposal and daily/intermediate cover.

Table 4: Class III Landfill - Projected Capacity Utilization
FY 2011 Financial Assurance Report
Volusia County, Florida

Year ⁽¹⁾	Time Period	Estimated Volume Utilized (CY)	Estimated Cumulative Volume Utilized (CY)	Permitted Disposal Capacity Remaining Capacity Remaining (CY)	Percent of Permitted Disposal Capacity Used ⁽⁴⁾
2009 ⁽²⁾	4/8/09 to 4/7/10	-	-	4,659,316	34%
2010	4/8/10 to 5/7/11	145,471	2,442,873	4,566,389	35%
2010	5/8/11 to 9/30/11	63,587	2,506,460	4,502,802	36%
2011	10/1/11 to 9/30/12	160,403	2,666,862	4,342,400	38%
2012	10/1/12 to 9/30/13	161,284	2,828,146	4,181,116	40%
2013	10/1/13 to 9/30/14	163,122	2,991,268	4,017,994	43%
2014	10/1/14 to 9/30/15	165,303	3,156,571	3,852,691	45%
2015	10/1/15 to 9/30/16	167,313	3,323,884	3,685,378	47%
2016	10/1/16 to 9/30/17	169,229	3,493,114	3,516,148	50%
2017	10/1/17 to 9/30/18	171,111	3,664,225	3,345,037	52%
2018	10/1/18 to 9/30/19	172,956	3,837,181	3,172,081	55%
2019	10/1/19 to 9/30/20	174,781	4,011,962	2,997,300	57%
2020	10/1/20 to 9/30/21	176,593	4,188,555	2,820,707	60%
2021	10/1/21 to 9/30/22	178,409	4,366,964	2,642,298	62%
2022	10/1/22 to 9/30/23	180,210	4,547,174	2,462,088	65%
2023	10/1/23 to 9/30/24	181,998	4,729,172	2,280,090	67%
2024	10/1/24 to 9/30/25	183,768	4,912,940	2,096,322	70%
2025	10/1/25 to 9/30/26	185,518	5,098,458	1,910,804	73%
2026	10/1/26 to 9/30/27	187,232	5,285,689	1,723,573	75%
2027	10/1/27 to 9/30/28	188,914	5,474,603	1,534,659	78%
2028	10/1/28 to 9/30/29	190,563	5,665,166	1,344,096	81%
2029	10/1/29 to 9/30/30	192,185	5,857,351	1,151,911	84%
2030	10/1/30 to 9/30/31	193,766	6,051,117	958,145	86%
2031	10/1/31 to 9/30/32	195,641	6,246,758	762,504	89%
2032	10/1/32 to 9/30/33	197,534	6,444,292	564,970	92%
2033	10/1/33 to 9/30/34	201,375	6,645,667	363,595	95%
2034	10/1/34 to 9/30/35	203,323	6,848,991	160,271	98%
2035	10/1/35 to 7/11/36	160,271	7,009,262	0	100%
Calculated Closure Date					July 2036

1) Year generally represents October 1 to September 30 (i.e. year 2012 is from October 1, 2012 to September 31, 2013).

2) Source is 2010 Financial Responsibility Report, HDR Engineering dated August 2010.

3) The total air space remaining as of the 5/7/2011 aerial survey was calculated to be 5,001,505 (final cap to 133 feet). The required volume for final cover is 435,116 cubic yards of final cover, per Renewal Application for Operating Permit, SCS, 2009. A remaining capacity of 4,566,389 cubic yards was assumed to be utilized for waste disposal and intermediate cover.

4) The total design capacity is based on 2010 Financial Responsibility Report HDR Engineering dated August 2010.

**Table 5: Summary of Closing & Final Closure of Landfills
FY 2011 Financial Assurance Report
Volusia County, Florida**

	Time of Closure ⁽¹⁾	Acreage Remaining to be Closed ⁽⁴⁾	Acreage Closed	Approximate Time of Post-closure LTC ^(1,4)	Remaining Years of Operations under Current Footprint ⁽¹⁾	Remaining Years of LTC under Current Status
1. Tomoka Farms Road Landfill						
South Cell ⁽²⁾	---	0	114	---	0	30
North Cell Class I	March 2017	67	0	2017-2047	6	30
Class III Landfill	July 2036	88	0	2036-2066	25	30
2. Plymouth Ave. Landfill						
Final Closure (LTC Period)	---	0	39	---	0	19

Notes:

1) As calculated in Tables 3 and 4 of this report. Reference date is 9/1/2011.

2) Under the current FDEP permit, the thirty-year long term care period for the South Cell landfill will begin once the North Cell Class I Landfill is certified closed by the FDEP.

3) Plymouth Avenue Landfill's Remaining Years of LTC was acquired from Financial Assurance spreadsheet from Volusia County Solid Waste Accounting and subtracting one year.

4) Class III acreage and approximate time of closure increased in 2008 to reflect lateral and vertical expansion approved by FDEP.

**TABLE 6: Summary of Estimated Cost & Escrow Analysis
FY 2011 Financial Assurance Report
Volusia County, Florida**

Facility	Updated Closing Cost Estimate	Updated Annual LTC Cost Estimate	Total Updated LTC Cost Estimate	Total Updated Cost Estimate
1. Tomoka Farms Road Landfill				
South Cell-Previously Closed (LTC Period)	---	\$ 171,472	\$ 5,144,149	\$ 5,144,149
North Cell (in Operation)	\$ 10,824,720	\$ 126,962	\$ 3,808,875	\$ 14,633,595
Class III Landfill (in Operation)	\$ 7,941,153	\$ 92,808	\$ 2,784,228	\$ 10,725,381
2. Plymouth Ave. Landfill				
Previously Closed (LTC Period)	---	\$ 90,462	\$ 1,718,774	\$ 1,718,774
3. Used Tire Area (in Operation)	\$ 10,718	---	---	\$ 10,718
Total Estimated Cost	\$ 18,776,591	\$ 481,704	\$ 13,456,026	\$ 32,232,617

Facility	South Cell Landfill	North Cell Class I Landfill	Class III Landfill	Plymouth Ave. Landfill	Used Tire Area ⁽⁵⁾	Total Cost
Estimated Updated Closing Cost (CE)	\$ -	\$ 10,824,720	\$ 7,941,153	\$ -	\$ 10,718	\$ 18,776,591
Months of Exhausted Design Life (DE) ⁽¹⁾	---	147	159	---	---	---
Months of Total Design Life (DL) ⁽²⁾	---	214	457	---	---	---
Documented Closure Expenses (E)	---	0	0	---	0	---
Remaining Years of Long-term Care	30	30	30	19	0	---
Estimated Updated Post-Closure LTC Cost	\$ 5,144,149	\$ -	\$ -	\$ 1,718,774	\$ -	\$ 6,862,923
Escrow Account Balance (period ending September 30, 2010) ⁽³⁾	\$ 169,799	\$ 7,310,149	\$ 2,861,727	\$ 89,579	\$ 34,505	\$ 10,465,759
Total Escrow Funding Required ⁽⁴⁾	\$ 171,472	\$ 7,436,815	\$ 2,763,145	\$ 90,462	\$ 10,718	\$ 10,472,611
Total Estimated Increase/(Decrease) for FY-11 Requirement	\$ 1,673	\$ 126,666	\$ (98,582)	\$ 883	\$ (23,787)	\$ 6,852
Financial Responsibility Escrow Account Balance for FY-11 FDEP Requirement						\$ 10,472,611

Notes:

1) Exhausted design life as of September 1, 2011.

2) North/Phase I Landfill: opening date is June 1999 and closure date of February 2017 as calculated in Table 3 (147 months of exhausted life, 214 months of design life). Class III landfill - opening date is June 1998 and closure date of June 2037 as calculated in Table 4 (159 months of exhausted life, 457 months of design life).

3) See attached documentation from James & Moore (Attachment B).

4) With the exception of the used tire facility, the escrow account funding required for closure of active sites was calculated using the formula [CE x DE/DL] - E. Funding requirements for sites in post-closure care are required to provide funding for one year. Keeping with last year's report methodology, it was assumed that the escrow funding required for closing the waste tire facility is equal to the calculated cost of disposing the waste tires.

5) The cost for closing the waste tire area was calculated by multiplying 125 tons of tires at average expense of disposing rimmed tires (\$74.82/ton), de-rimmed tires (\$52.41/ton) and over-sized tires (\$130/ton). Quantity of waste tires (125 tons) is calculated by averaging waste tire quantities reported in last four *Quarterly Waste Tire Report & Inventory Update* reports submitted to the department (from 2nd quarter 2010 to 1st quarter 2011).

SECTION 5.0

Sources

1. Volusia County Solid Waste System, Financial Responsibility Closure and Long Term Care Costs Report, FY 2010, August 2010, HDR Engineering, Inc.
2. Schedule of Activities, Landfill Management Escrow Accounts, September 30, 2010, James Moore & Co., P.L. dated March 15, 2010.
3. Waste Tire Processing Price Agreement between County of Volusia and MTR of Georgia, Inc. for the period 4/1/2008 to 4/12/2013.
4. Volusia County Public Works Department - Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 2nd Quarter 2010 dated June 9, 2010.
5. Volusia County Public Works Department - Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 3rd Quarter 2010 dated October 14, 2010.
6. Volusia County Public Works Department - Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 4th Quarter 2010 dated January 12, 2011.
7. Volusia County Public Works Department - Solid Waste Division, Quarterly Waste Tire Report, 1st Quarter 2011 dated June 10, 2010.
8. FDEP Operation Permit-North Cell Class I Landfill Tomoka Farms Road Solid Waste Management Facility
9. FDEP Construction Permit-North Cell Class I Landfill Phase II Expansion Tomoka Farms Road Solid Waste Management Facility
10. FDEP Closure Permit-North Cell Class I Landfill-Tomoka Farms Road Solid Waste Management Facility
11. FDEP Operation Permit-Class III Landfill-Tomoka Farms Road Solid Waste Management Facility
12. FDEP Closure Permit -South Cell Landfill -Tomoka Farms Road Solid Waste Management Facility
13. FDEP Closure Permit -Plymouth Avenue Landfill
14. Topography Survey and Mapping Report, Aerial Cartographics of America, April 2010 (ACA Job Number 2010630)
15. Topography Survey and Mapping Report, Aerial Cartographics of America, May 2011 (ACA Job Number 20011627)
16. Certified Topographic Survey Capacity Calculation Report, Aerial Cartographics of America, November 2008 (ACA Job Number 2008679)

Attachment A

Mapping Report

Tomoka Farms Road Solid Waste Disposal Facility



Photogrammetric Survey and Map Report

Provided by **AERIAL CARTOGRAPHICS OF AMERICA, INC.**
LB # 0006748

U.S. MAIL
P.O. Box 593846
Orlando, FL. 32859-3846

Phone (407) 851-7880 Fax (407) 855-8250

DELIVERIES
1722 W. Oak Ridge Rd.
Orlando, FL. 32809

P.S.M. in responsible charge: Mark Detrick PSM # 5433

Title: Topographic Survey

Date of Survey: (photography) 05/07/2011 Date of Field Edit: N/A

Subject Name: Volusia County Landfill

Ref. No.: 2011627 County: Volusia

File Name: 11627_Volusia_2011.dwg

Aerial Target Survey Provided by: Sliger & Associates

Datum:

Horizontal NAD 83/90 Florida State Plane East Zone, U.S. Survey Feet

Vertical NGVD 29 U.S. Survey Feet

Notes

- a.) Accuracies: The following stated accuracies are plus or minus tolerances that pertain to 90% of the information when compared to actual field measured position. These accuracies can be based on the results of the aerial triangulation.

(Horizontal:) Features shown are intended to be accurate to 1'.

(Vertical:) The 2' contours shown are accurate to 0.5' excluding those in dense vegetation that have no stated accuracy. These contours will be shown as dashed lines.
Spot elevations are accurate to 0.5'.

- b.) This map is intended to be displayed at 1"= 100' or smaller.
- c.) Analytical aerial triangulation was performed on the survey control and was determined to be acceptable.
- d.) The attached survey map has not been field verified therefore it is recommended that a field verification be performed to determine actual accuracies and map content.
- e.) This survey map is neither full nor complete without the attached survey map referencing this report and is not valid without the signature and original raised seal of a Florida Licensed Surveyor and Mapper.

Certification: I hereby certify to the best of my knowledge, the above information is correct and that the work performed by Aerial Cartographics of America was under my supervision. The photogrammetric survey meets the Minimum Technical Standards of the Department of Agriculture and Consumer Services, Chapter 5j-17-050 thru .052, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

I Mark Detrick certify that the Quality Control (QC) was conducted on this project and found to meet required specifications.

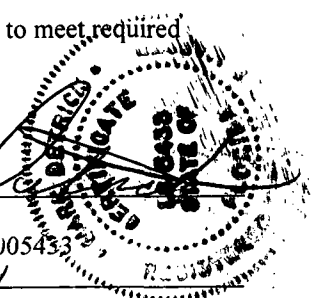
Signed: _____

Mark Detrick, P.S.M.

Florida Surveyor & Mapper #LS0J05433

Date of Report: _____

June 7, 2011



Page 2 of 2

Attachment B

FY – 2011 Escrow Account Balance

**COUNTY OF VOUSIA, FLORIDA
LANDFILL MANAGEMENT ESCROW ACCOUNTS
SCHEDULE OF ACTIVITY
FOR THE YEAR ENDED SEPTEMBER 30, 2010**

	<u>Tomoka Class III</u>	<u>Tomoka Class I</u>	<u>Tomoka South</u>	<u>Plymouth</u>	<u>Waste Tire</u>	<u>Total</u>
Escrow Account Balances, October 1, 2009	<u>\$ 2,863,995</u>	<u>\$ 6,980,621</u>	<u>\$ 168,120</u>	<u>\$ 88,693</u>	<u>\$ 34,506</u>	<u>\$ 10,135,935</u>
Deposit						
August 31, 2010	<u>88,598</u>	<u>226,318</u>	<u>5,257</u>	<u>2,773</u>	<u>1,068</u>	<u>324,014</u>
Interest income						
October 31, 2009	195	498	12	6	2	713
November 30, 2009	160	409	9	5	2	585
December 31, 2009	87	222	5	3	1	318
January 31, 2010	23	59	1	1	-	84
February 28, 2010	23	60	1	1	-	85
March 31, 2010	55	142	3	2	1	203
April 30, 2010	94	240	6	3	1	344
May 31, 2010	160	409	9	5	2	585
June 30, 2010	153	390	9	5	2	559
July 31, 2010	221	565	13	7	3	809
August 31, 2010	223	570	13	7	3	816
September 30, 2010	<u>194</u>	<u>495</u>	<u>12</u>	<u>6</u>	<u>2</u>	<u>709</u>
Total interest income	<u>1,588</u>	<u>4,059</u>	<u>93</u>	<u>51</u>	<u>19</u>	<u>5,810</u>
Escrow Account Balances, September 30, 2010 before transfers due to changes in required escrows	<u>2,954,181</u>	<u>7,210,998</u>	<u>173,470</u>	<u>91,517</u>	<u>35,593</u>	<u>10,465,759</u>
Transfers due to changes in escrow required	<u>(92,454)</u>	<u>99,151</u>	<u>(3,671)</u>	<u>(1,938)</u>	<u>(1,088)</u>	<u>-</u>
Escrow Account Balances, September 30, 2010	<u>\$ 2,861,727</u>	<u>\$ 7,310,149</u>	<u>\$ 169,799</u>	<u>\$ 89,579</u>	<u>\$ 34,505</u>	<u>\$ 10,465,759</u>
Cash and Cash Equivalents	<u>\$ 2,861,727</u>	<u>\$ 7,310,149</u>	<u>\$ 169,799</u>	<u>\$ 89,579</u>	<u>\$ 34,505</u>	<u>\$ 10,465,759</u>

The accompanying notes to the schedule of activity
are an integral part of this schedule.

**COUNTY OF VOLUSIA, FLORIDA
LANDFILL MANAGEMENT ESCROW ACCOUNTS
NOTES TO SCHEDULE OF ACTIVITY
SEPTEMBER 30, 2010**

(1) Reporting Entity:

The County of Volusia, Florida (the County) is a political subdivision of the State of Florida, which is responsible for legislative and fiscal administration of the County.

The Schedule of Activity for the Landfill Management Escrow Accounts of the County, (the Schedule) is prepared and submitted to the State of Florida Department of Environmental Protection pursuant to Section 62-701.630 of the Florida Administrative Code (the Code). The Schedule contains only the escrow balances required by the Code and is not intended to present the financial position of the County of Volusia, Florida's Refuse Disposal Fund, or any fund in the County's financial statements.

(2) Landfill Management Escrow:

The County records the landfill management escrows as restricted cash to fund postclosure care costs of the Plymouth Landfill and closure costs and postclosure care costs of the Tomoka Landfill. The escrow, which is part of the County's cash and cash equivalents, is calculated annually based on the "balance" method, which uses months of exhausted design life as a percentage of total design life times the estimated costs calculated by inflationary indexes or, if changes to the facility are made, by a study performed by a Registered Professional Engineer.